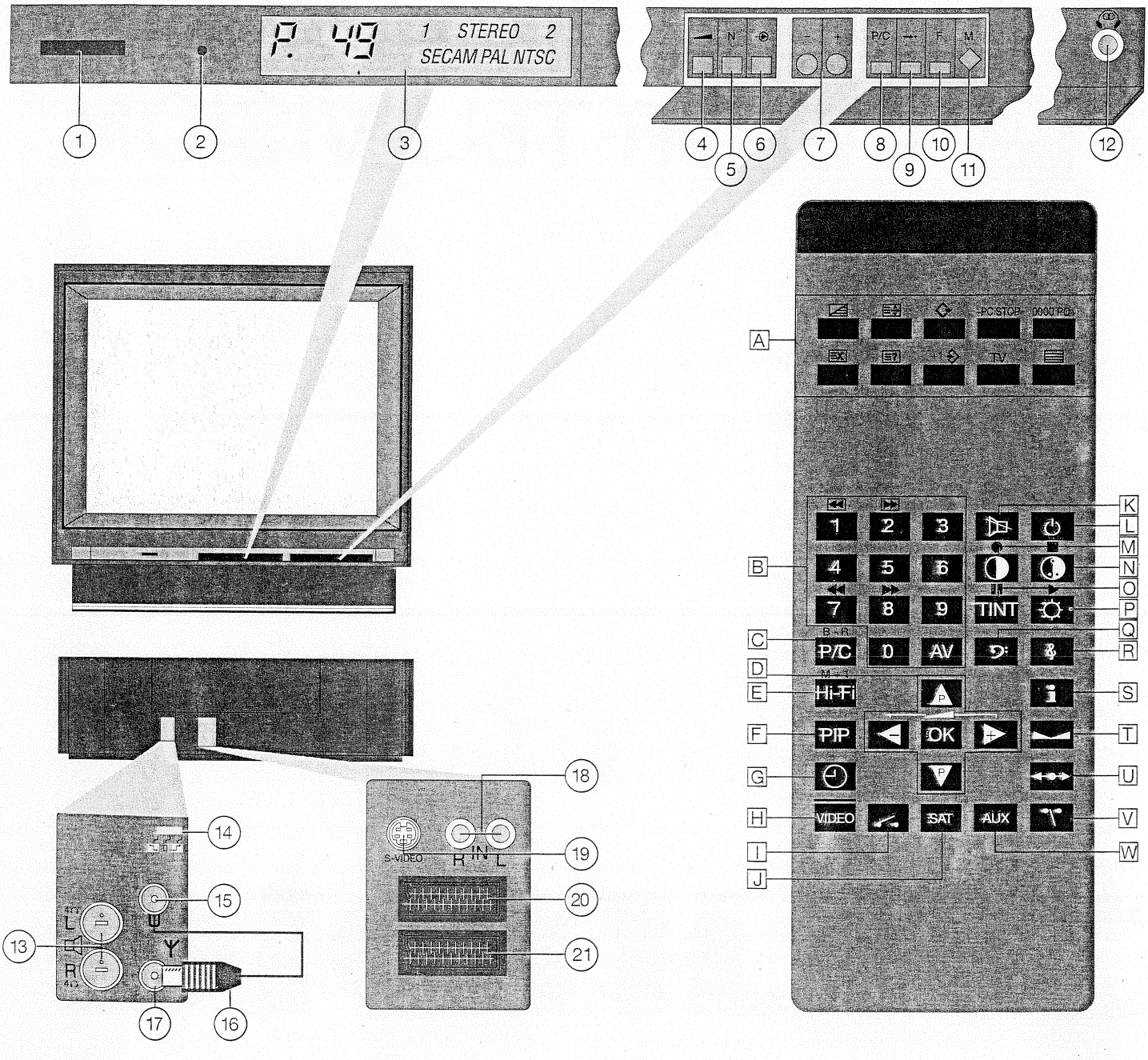
TV COLOR TELEVISION

ST 82–575/9 PIP/text

ST 95–575/9 PIP/text

GRUNDIG


P. 49
1 STEREO 2
SECAM PAL NTSC
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Hi-Fi
PIP
OK
VIDEO
SAT
AUX
TV
13
14
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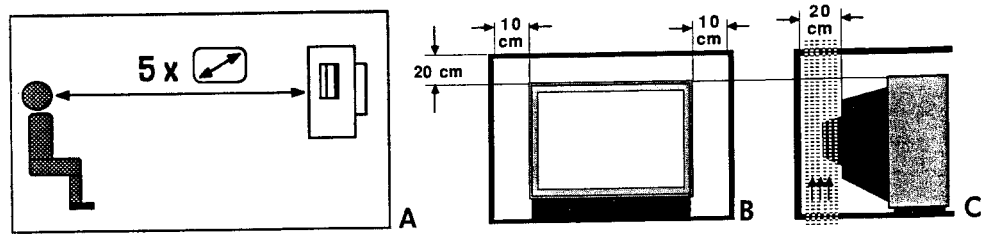
21
S-VIDEO
IN

Positioning

Position your TV receiver so that as little stray light as possible falls on the screen from the front.
The ideal viewing distance from the set is five times the screen diagonal (see illustration A).
Do not cover the ventilation slots in the back panel.
The set generates heat which must be able to escape.
A build-up of heat reduces the life of the set and presents a source of danger.
For this reason, when operating the receiver in a closed cabinet, minimum distances must always be maintained (see illustrations B and C).



Canceller Switch ⑭
(ST 95-575/9 PIP/text only)
The magnetic field of the earth is different. Depending on the direction of positioning, it affects the colour purity errors which appear as colour impurities – mainly in the upper and lower part of the screen. These colour purity errors can be corrected with the canceller switch ⑭.
The effectiveness of the switch depends also on the direction in which the set is positioned. The West/East or East/West direction has proved to be favourable (see figure).
In this case, the switch ⑭ should be set to position "0" (centre).
If the set has been positioned deviating from the West/East or East/West direction, the switch should be set to the right or left position.
It is best to use a test picture to establish the position which provides the best colour purity of the screen.

Control Buttons and Connecting Sockets on the TV Set

For readers in a hurry

Figures in circles ○ = buttons and connections on the TV set

Front Panel

The control buttons and the headphone socket are located behind a flap.
Press on the flap to open it.

① IO = Main switch, automatically selects station position 1 when switching on.

② O = Set in standby position, indication illuminated

③ Display

1 = 2-channel broadcast, sound channel 1 switched on

2 = 2-channel broadcast, sound channel 2 switched on

STEREO = Stereo broadcast

PAL, SECAM, NTSC } Indication of the reception standard; the set automatically switches to the correct standard

Indications according to operation, eg:

P 49 = Programme position 49 selected

P.49 = Programme position 49 selected, AV operation programmed.

C 12 = Channel 12 entered

C.28 = Channel 28 entered, AV operation possible

S 18 = Special channel 18 entered

S.21 = Special channel 21 entered, AV operation possible

A 1 = Video operation via Euro-AV socket ㉑

A 2 = Camera recorder operation via Euro-AV socket ⑳

A 3 = S-VHS video or S-VHS camera recorder operation via S socket.

Preset buttons ④ ⑤ ⑥ ⑧ ⑨ ⑩

By pressing one of these buttons you determine which adjustment is to be changed. Then change the respective adjustment with the setting buttons ⑦.

④ = Volume

⑤ N = TV Standard identification

⑥ = Programme position selection for external units

⑦ − + = Setting buttons for changing the preset values (+ = more/− = less)

⑧ P/C = Programme/channel/special channel selection

⑨ = Automatic station search

⑩ F = Fine tuning/picture sharpness

⑪ M (Memory) = Button for storing the values adjusted with buttons ⑦

⑫ = Earphone socket, 6.3 mm ø

Sockets on the Rear of the Set

⑬ = Connections for additional loudspeakers, DIN 41 529

⑭ = Canceller switch for correcting the colour purity (ST 95–575/9 PIP/text only)

⑮ = Aerial socket for PIP reception, 75 Ω, coaxial, DIN 45 325, IEC 169-2

⑯ = Insert the plug from the PIP module into the aerial socket ⑰.

⑰ = Aerial socket for large picture (normal) reception, 75 Ω, coaxial, DIN 45 325, IEC 169-2

⑱ Cinch sockets = Connections for S-VHS audio input, R = input, RH channel, L = input, LH channel

⑲ S-socket = Connection (video) for S-VHS video recorder or S-VHS camera recorder.

⑳ EURO-AV socket (blue) = Connection for standard video recorder

㉑ EURO-AV socket (black) = Universal connection, DIN EN 50 049 eg: for non-standard video units with RGB output

The Buttons of the Remote Control Handset

Letters in rectangle □ = buttons on the remote control handset

Remote Control Handset

[A] Group of buttons for **Teletext and PIP mode**
(An adhesive label for picture-in-picture (PIP) mode is supplied with the set)

[B] **Station position selection** and **switching on** from standby

[C] Switching between **Programme position/Channel/Special channel;** in **channel mode:** station search start with ▲ or ▼.

[D] Group of buttons
- **Programme selection** ▲ step by step (1, 2, 3 ...)
- **Programme selection** ▼ step by step (... 3, 2, 1)
- Calling up **basic adjustments OK** (picture and sound)
- On **channel selection,** confirm with ◇ and store with **OK.**
- Lower **volume** ◀ and reducing preset values on all modifications of picture and sound after preselection.
- Louder **volume** ▶ and increasing preset values on all modifications of picture and sound after preselection.

[E][F] Picture in picture operation

[G] **Clock time** ◴ indication

[H] **Video recorder** remote control
(see separate operating instructions of video recorder)

[I] No function on this set

[J] **Satellite receiver** remote control
(see separate operating instructions of satellite receiver)

[K] **Sound on/off** (muting)

[L] Switching to **Standby** ⏻

Preset buttons for:

[M] **Black/white contrast** ◑

[N] **Colour contrast**

[O] **Tint correction** on NTSC reception (**TINT**)

[P] **Brightness** ☼

[Q] **Bass**

[R] **Treble** 𝄞

[T] **Stereo balance**

Each of these values can be changed with the buttons ◀ and ▶.

[S] Calling up the **Teletext Summary**

[U] **Stereo base expansion/spatial-sound effect** ↔

[W] **Volume** preset button for headphone operation. Change preset value with buttons ◀ and ▶.

[V] **Sound channel** switching "\"
on two-channel sound broadcasts (2/1 ; 1/2).
When the stereo sound quality is poor (noise), this button permits to switch over to mono reproduction.

Operation with the Controls on the TV Set

Tuning to TV Stations

TV stations transmit television programmes on different channels, eg: the TV station Dillberg (Bay.) the first programme (ARD) on channel 6.

These programmes must be allocated to the station (programme) positions of the TV receiver.

The following adjustments are required only when setting up the set for the first time or when the reception conditions have changed (eg: when changing the place of residence or after the set has been connected to a cable system).

The TV set is provided with 49 station positions and the additional programme position A1 for the programme (reproduction) of your video recorder, and A2/A3 for reproduction from a camera recorder.

The set can reproduce in colour the broadcasted programmes of stations using the PAL, SECAM or NTSC standard (also from satellites and cable systems).

Code No.	Standard	Sound (MHz)	Application
n 0	CCIR (PAL/SECAM)	5.5 FM	eg: Federal Republic of Germany, GDR, Austria, Switzerland, Italy
n 0	NTSC (4.43 MHz colour)	5.5 FM	NTSC-recorder playback of corresponding VCR recordings
n 1	FR-L (SECAM)	6.5 AM	France only
n 2	GB-I (PAL)	6 FM	eg: Great Britain, Ireland, Hong Kong (BFN)
n 3	OIRT (SECAM/PAL)	6.5 FM	eg: Eastern Bloc States, U.S.S.R., China
n 4	NTSC (3.58 MHz colour)	4.5 FM	U.S. standard (AFN) NTSC playback of corresponding VCR recordings.
n 5	–	–	–
n 6	–	–	–

For this purpose, the receiver needs **two sets of information:** the **TV standard identification** (code no., see table) and the **channel number** of the respective station.

Information about the channel numbers/special channel numbers and TV standards can be obtained from your dealer, after-sales service or post office.

TV Standards

TV stations of different countries operate with different TV standards. The table shows the different standards and countries. If you wish to tune to channels of these stations, you must also select the correct standard (see above).

Station position 1

Code No. "0"

Channel No. 49

Special channel 16

Station pos. 15 selected, AV operation possible

Video operation via black Euro-AV socket

Programme position "A 2", eg: for camera recorder operation.

Operation with the Controls on the TV Set

TV stations (programmes) can be assigned to the station positions of the TV receiver
– by **entering the channel number**, or
– with the help of the **station search system.**

The required operating controls are located behind the flap. Press on the flap to open it.

Switching on

- Switch on the TV receiver with the mains button IO ①.

– Station position 1 is automatically selected and **P 1** as well as the selected TV standard (eg: PAL) appear in the display.

Selecting a station position

- Select the desired station position with the buttons ⑦ + or –.

– The display shows: **P 1** to **P 49** or **A 1** to **A 3.**

Volume

- Press button ◢ ④ and adjust the volume with the buttons ⑦ + or –.

– Store the adjusted value with button **M** ⑪.

Selecting the TV standard code number

- Press button **N** ⑤.

– The display shows for example **n 0** (**n** for standard).

- Select the required standard (code number) with button ⑦ + or – (see table of TV standards).

– The display shows the selected standard (**n 0** – **n 6**).

- Press button **M** ⑪ to store the code number.

– The display will show the letter **P** (**P** for programme position).

Tuning by entering the channel number

1. Selecting a station position

- Press button **P/C** ⑧ until the display shows **P** (P for programme).

– Select the desired station position with button ⑦ + or –, eg: P 1.

- Press button **P/C.**

– The display will show the letter **C** (**C** for channel) and a channel number between 01 and 99.

2. Entering the channel/special channel number

- Press button ⑦ + or – until the desired channel number, eg: **06**, appears in the display.

– If you wish to enter special channel numbers, press button **P/C** once again (indication **S-** for special channel).

3. Storing the channel/special channel number

- Press button **M** ⑪.

– The display shows **P** (**P** for station (programme) position).

4. Selecting the next station position

- Use buttons ⑦ + or – to select the next station position and repeat this procedure as often as required.

Tuning with the automatic station search facility

This tuning method is recommended if you do not know on which channels the different programmes are transmitted.

1. Selecting a station position

- Press button **P/C** ⑧.

– The display shows **P** (**P** for station position).

- Select the desired station position, eg: **P 2,** with button ⑦ + or –.
- Press button **P/C** ⑧.

– The letter **C** (**C** for channel) and a channel number between **01** and **99** appears in the display.

2. Starting the automatic station search

- Select the automatic station search mode with button →• ⑨.
- Start the station search with button ⑦ + (in upward direction) or with button – (in downward direction).

– The station search will stop at each station that is found, eg: **34.**
If this station is not the desired one, start the station search again until the desired station is found.

– Your TV set searches the channels 01 to 99, then the special channels S 01 to S 41 (an **S** appears in front of the channel number).

3. Storing the channel/special channel number

- Press button **M** ⑪.

– The display will show the letter **P** (**P** for station position).

4. Selecting the next station position

- Select the next station position with button ⑦ + or – and repeat the procedure.

If you require only the station positions **1** to **9**, you may "restrict" the selection of the station positions.
For this, proceed as follows:

- Switch off TV set with mains switch IO ①.
- Press and hold down button **M** ⑪ on the control panel (behind the flap) of the TV set and simultaneously press the mains switch IO ①.

– You now can select **only** the station positions **1** to **9**.
– If you wish to select all of the **49** station positions again, repeat the procedure.

Fine-tuning the picture

The TV set will automatically tune to optimum picture sharpness. However, on difficult reception conditions, it may occasionally be necessary to alter the setting of the picture sharpness:

- **Selecting the fine-tuning mode**

– Press button **P/C** ⑧ until the display shows **C** or **S**, then press button **F** ⑩.

- **Altering the picture sharpness**

– Change the picture sharpness with the button ⑦ + or –.

- **Storing the corrected tuning point**

– Store the adjustment with button **M** ⑪.

Station position selection for external units

Each station position can be adjusted for playback from an external unit (eg: a video recorder with the switching voltage connected to Pin 8 of the EURO-AV sockets) being connected to the black EURO-AV socket.

Example: You are receiving till today three television programmmes and wish to allocate your video recorder to station position 4.

- **Selecting station position 4**

– Press button ⑦ **+** until **P 4** appears in the display.

- **Activating the station position for the reservation**

– Press button ⊖ ⑥.
– A dot appears behind the **P** in the display.

- **Storing the station position**

– Press button **M** ⑪.

Operation with the Controls on the TV Set

Changing the basic settings

At the factory, the picture and sound have been set to optimum values. However, you can change these optimum settings. For example, when you are always watching TV from a great distance, you can set the volume so that it will be **permanently** louder.

- **Changing the volume**

– Use button ◢ ④ to select the volume function on the set and press button ⑦ – (softer) or + (louder) on the set, or
– press button ◀ (softer) or ▶ (louder) on the remote control, group of buttons [D], until the volume is to your taste.

- **Storing the changed value**

If you wish to change a value **permanently** – whether on the TV set or on the remote control – the value **must** be stored after changing.
– Press button **M** ⑪.

For all other adjustments

- **first** select the desired function with the following buttons on the remote control:

[M] ◑ = black/white contrast
[N] ◔ = colour contrast
[P] ☼ = brightness
[Q] ♪ = bass (tones)
[R] 𝄞 = treble (tones)
[T] ◣◢ = stereo balance

– An illuminated dot appears for approx. 4 seconds in the display ③.
– During this period of time, press button ◀ or ▶ on the remote control, group of buttons [D], until the adjustment is to your taste.

Note:

Your colour TV set has been tested with maximum contrast setting to check the reliability of all components.
Depending on the place of installation of the TV set and the room brightness (ambient light), we recommend to **reduce** the contrast setting so that the best possible picture impression is obtained.

- **Storing the changed value**

– Press button ⑪ on the TV set.

The changed values are stored and will be obtained again even after having switched off the set.

Operation with the Remote Control

Tuning to stations with the remote control

Station programming (allocating TV programmes to station positions) can also be performed with the **remote control.**

Entering the channel numbers directly with the remote control

Switching on

- Switch on the TV receiver with the mains button IO ①.
- – Station position 1 is automatically selected and the display will show **P 1** and the selected TV standard, eg: PAL.

1. Selecting a station position

- Select the desired station position step by step with the buttons [D] ▼ or ▲, or
- select the station positions **1** to **9** with the numbered buttons [B] **1**...**9**.
- – For the two-position station positions **10** to **49**, first enter the tens position. This will flash for about 4 seconds. During this period of time, enter the units position.
- Press button **P/C** [C] .
- – The display shows **C** (**C** for channel) and a number between **01** and **99**.
- If you are able to receive cable TV stations on special channels and you wish to tune to such a channel, press button **P/C** [C] once again
- – The display shows **S--** (**S** = special channel).

2. Entering the channel number

- Enter the desired channel number as two figures with the numbered buttons [B] **1**...**0**, eg: **0** and **6** for channel 6.
- – The receiver will automatically tune to best picture sharpness.

3. Storing the channel number

- Press button ◇ of the group of buttons [A] .
- – The channel number will flash in the display.
- During flashing of the channel number, press button **OK**.
- – **P** will appear in the display (**P** = programme position).

Tuning with the automatic station search system and the remote control

1. Selecting a station position

- Select the desired station position step by step with the buttons [D] ▼ or ▲, or
- select the station positions **1** to **9** with the numbered buttons [B] **1**...**9**.
- – For the two-position station numbers **10** to **49**, first enter the tens position. This will flash for about 4 seconds. Enter the units position during this period of time.
- Press button **P/C** [C] .
- – The display will show **C** (**C** for channel) and a channel number between **01** and **99**.

2. Starting the station search

- Start the station search with button ▼ or ▲ of the group of buttons [D] .
- – The station search will now start to scan all of the TV channels (also the special channels) and will stop as soon as a station is found. If this station is not the required one, start the station search again until the desired station is found.
- – The picture is automatically tuned to best sharpness.

3. Storing the channel number

- Press button ◇ of group of buttons [A] .
- – The channel number will flash in the display.
- During flashing of the channel number press button **OK**.
- – The display will show **P** (**P** = station position).

Picture in Picture Operation

Picture in Picture

With the **"PIP"** (Picture in Picture) function, it is possible to show another programme with a small picture format in the current programme.

Example of Application

You are watching a film on the first programme position and wish to simultaneously follow a socker match transmitted on the third programme position.

Activating the PIP

- Press button **PIP**. The display shows **b** (b = PIP mode) and the programme position on which the PIP is transmitted.
- Press button **PIP** once again. The display shows **P** (P = large picture mode) and the programme position on which the large picture ("normal" programme) is transmitted. The PIP remains visible.
- Press button **PIP** once again to return to the PIP mode.
- Press button **3** to select programme position 3. (To select further programme positions, proceed as for normal (large picture) programme selection, or use button ▼ or ▲.

The following functions are also possible in normal (large picture) mode:

Changing the PIP Position

– It is possible to successively show the PIP in four different positions on the screen:
Top left, bottom left, top right, bottom right.

- Repeatedly press the button **POSITION** until the PIP occupies the desired position.

Changing the PIP Frame Colour

– It is possible to successively show the PIP with eight different frame colours as well as without frame.

- Repeatedly press the button **FRAME** until the frame appears in the desired colour, or no frame is visible.

PIP Size

– It is possible to select two PIP sizes: 1/9 and 1/16 of the normal picture size.

- Press button **SIZE**.
- Press button **SIZE** once again to reverse the selection.

Storing the PIP in Memory

– It is possible to store in memory the **position**, the **frame colour**, and the **size** of the **PIP**.

- Press the button **STORE**: The programme position number will flash in the display. During flashing of the number press the button **OK** to store the respective function in the memory.

Still PIP

It is possible to "freeze" the PIP, which may be of advantage for example when noting down the winning Lotto numbers.

- Press the button **STILL PICTURE**.
- Press the **STILL PICTURE** button again to cancel this function.

Exchanging the PIP with the Large Picture

- Press the button **CHANGE**.
- Press the button **CHANGE** again to reverse the function.

PIP Programme Search

- Press the button **SEARCH**.

– The automatic programme search will briefly stop at each programme position and then proceed to the next one.
– If the programme position number **00** is found, the programme search will pass the AV positions (A3...1) and start again with programme position 1.

- Press the **SEARCH** button again to stop the programme search.

Monitoring an AV Connection

- Press the button **MONITOR**.
- Repeatedly press the button **MONITOR** until the desired AV position number is shown.

– It is also possible to distinguish the different AV positions by their frame:
A1 = without frame,
A2 = blue frame,
A3 = red frame.
– Cancel the monitor mode by pressing any desired programme button.

Picture in Picture Operation

Selecting a Programme Position for Large Picture (Normal) Mode in the PIP Mode (the display showing b --)

- Press the button **AUX**: A flashing dot appears in the display.

– When the point is flashing, select the programme position for the large picture (normal mode) with the button ▼ or ▲.

Selecting a Programme Position for PIP Mode in the Normal Mode (the display showing P --)

- Press the button **AUX**: A flashing dot appears in the display.

– When the point is flashing, select the programme position for the small picture (PIP mode) with the button ▼ or ▲.

Switching Off the PIP Mode

- Press the button **OFF** or the button marked ⏻.

Videotext (Teletext) Operation

- Use the numbered buttons **1**...**0** to select the station position from which you whish to call up the Teletext pages.

Switching on Teletext

- Press button ▤.
- A Teletext page appears with information at its top, such as

S 100	=	Page number
ARD	=	The TV station you are receiving
08. 02. 90	=	The real date
16:02:19	=	The real time

- Page 100 shows the contents of the Teletext service.

Calling up Teletext pages

- Select the number of the desired page as **three figures** with the numbered buttons **1**...**0**.
- The number of the selected page appears at the top of the TV screen and the page appears after a short time.
- The next page can be selected with button + **1** ⇨ (**current page number + 1 page**).

Subpages

Some page numbers may contain several subpages which are changed automatically by the broadcasting stations. Subpages are marked by an insert below the clock time indication, eg: 3/6 means that the third of 6 subpages is shown.

If you wish to hold a subpage for a longer period

- press button **–PC/STOP**.
- Above the clock time **Stop** appears.
- To return to the changing cycle of the subpages, press button **–PC/STOP** again.

Calling up subpages directly

- Press button **0000/PC+**.
- **–0000** appears in the information line.
- Enter the desired number of the subpage (eg: 0003) as four figures with the numbered buttons **1**...**0**.
- The selected subpage appears after a short period of time.
- The next page can be selected with button + **1** ⇨.
- To delete this function, press button **0000/PC+** again.

Enlarging the character size

- Pressing button ▤ repeatedly:
- doubles the size of the top half of the page;
- doubles the size of the bottom half of the page;
- returns the complete page to normal size.

Displaying concealed text

The Videotext (Teletext) pages may contain "hidden" information, eg: quiz answers or the VPS times for programming a video recorder.

- Press button ▤ to make the "hidden" information visible (eg: S 303 – VPS times).
- Press button ▤ once more and the information is hidden again.

Updating of information

1. Updating a page

The Teletext service updates certain pages, eg:
- pages containing exchange rates,
- pages containing sport reports,
- pages containing the latest news.

If you wish to watch the TV but to be nevertheless informed about the latest news, then

- first select the respective page.
- Press button ▤.
- You will see the TV picture and Teletext information at the upper edge of the screen.
- As soon as the word **NEUE MELDUNG (UPDATE)** appears in the information line,
- press button ▤.
- The updated Teletext page appears.

Videotext (Teletext) Operation

2. Bridging waiting periods

Whilst the TV set is searching a Teletext page, you may return to the TV mode. To do this

- press button ⊠.
- – You will see the TV picture and Teletext information at the upper picture edge.
- – When the desired page is found, the word **ABRUFBEREIT (READY)** will appear.
- Press button ⊠ and the page will appear.

Terminating Teletext

- Press button **TV**.

Entering the station abbreviation (TV set)

If you wish to display the station abbreviations permanently, press the button →• on the set and the button ⊡7 on the remote control handset.
Pressing the same buttons again cancels the permanent display mode.

To do this, proceed as follows:

- Select the required station position on the TV set.
- Open the flap at the front of the TV set.
- Press button →• ⑨.
  A black rectangle appears on the screen and a question-mark is positioned above the first place. It marks the position to be changed.
  Any characters already stored can be altered.
  Repeatedly pressing the button + or – ⑦ changes the characters in steps, while holding one of the buttons pressed changes them rapidly.
  A blank may be found between 9 and A.
- Press button + or – until the required letter (eg: for SAT1 the S) is found.
- Pressing button →• moves the question-mark to the second position to be changed, and so on.
- After all the characters have been set,
- press button **M** ⑪ to store the station abbreviation in the memory.
  After that the letters and figures change their colour and then disappear briefly.

... with a video recorder

Connection:

Connect the video recorder with the video cable to the **black ㉑ or blue ⑳** EURO-AV socket (on the back of the set), or with an aerial cable (75 Ω) to the **aerial socket ⑮** (on the back of the set).

Operation

- Video recorder connected to the **black Euro-AV socket ㉑**.
- – Press **button AV** of group of buttons [B] on the remote control once.
- – Programme position **A 1** appears in the display.
  The picture/sound signal of the video recorder connected to the **black EURO-AV socket** can also be switched to any other station position (see "Station Position Selection for External Units").
  Start playback of the video recorder.
- Video recorder connected to the **blue Euro-AV socket ⑳**.
- – Press **button AV** of group of buttons [B] on the remote control twice.
- – Programme position **A 2** appears in the display.
  Start playback of the video recorder. The video recording can be seen on the TV screen.
- Video recorder connected to the **aerial socket ⑮**.
  Programme the channel specified for the video recorder (between 30 and 40) on any desired programme position (eg: P 16) (see "Tuning to TV stations by entering the channel number directly"). Normally, this transmitting channel is indicated in the operating instructions of the video recorder. If you do not know the transmitting channel, start playback from the video recorder and search the channel with the automatic station search of the TV receiver (see "Tuning to TV stations using the station search system").
  Note the selected programme position for later video playback. The picture sharpness can be improved if required (see "Fine-tuning the picture").

Changing the picture and sound settings for video playback

If there should be descrepancies in picture and sound between the TV picture you are accustomed to and the video reproduction (eg: sound too loud or too much colour contrast), these values can be modified and stored.
(These adjustments do not alter the basic settings of the TV picture).

- Use the following buttons to change the desired function:

[N] = colour contrast	[T] = stereo balance
[P] = brightness	[Q] = bass tones
[M] = black/white contrast	[R] = treble tones

  A flashing dot will appear for approx. 4 seconds in the display.
- During this period of time, press button ◀ **or** ▶ of the group of buttons [D] on the remote control until the selected function is to your satisfaction and store the value with button **M** ⑪ (on the TV receiver).
  Adjust the volume with button ▶ (louder) or button ◀ (softer) of the group of buttons [D] on the remote control and store the adjusted value with button **M** ⑪.

Remote control of video recorders

You can also use the remote control handset of this TV set for remote control of a **video recorder.** To find out which video recorders are suitable for this purpose, please ask your dealer.

- Press and **hold down** button **VIDEO**:
  In doing so, the remote control is switched to video recorder operation. Now press the desired function button.

The following listing shows you the functions that can be remotely controlled.

◀◀	(numbered button 1)	= Picture search, reverse
▶▶	(numbered button 2)	= Picture search, forward
●	(button ◑)	= Recording start
■	(button ◉)	= Stop
◀◀	(numbered button 7)	= Fast rewind
▶▶	(numbered button 8)	= Fast forward wind
▮▮	(**TINT** button)	= Pause
▶	(button ☼)	= Playback start
3	(numbered button 3)	= Slow motion selection
4	(numbered button 4)	= Station position –
5	(numbered button 5)	= Station position +

Connecting Possibilities and Operation ...

... with a camera recorder

Connection:

- Connect the camera recorder with an appropriate cable to the **blue EURO-AV socket** ⑳.

Operation:

- Repeatedly press button **AV** of the group of the buttons [B] on the remote control, until **A 2** appears in the display ③.
- Start playback of the camera recorder.

– Reproduction from the camera recorder is shown on the TV screen.

... with an S-VHS video recorder or an S-VHS camera recorder

When connecting an S-VHS video or camera recorder to the S socket of the set, the picture quality will further be improved. In this case, the sound signal will separately be applied to the Cinch sockets.

When the blue Euro-AV socket is occupied, the S socket must remain free. Only one of these two sockets can be used at a time (either the S or blue AV socket).

Operation:

- Repeatedly press button **AV** of the group of the buttons [B] on the remote control, until **A 3** appears in the display ③.
- Start playback of the camera recorder.

– Reproduction from the camera recorder is shown on the TV screen.

... with a Satellite receiver

Connection:

- Connect the Satellite receiver via an appropriate cable to the **black EURO-AV socket** ㉑.

Operation:

- Select the **A 1** station position with button **AV** of the group of buttons [B] on the remote control.
- Press and hold down button **SAT** [J] and select the desired station position for the Satellite receiver with the numbered buttons **1** ... **0**.

... with a stereo headphone

Connection:

- Remove the cover at the front of the set by pressing on it and insert the plug of the headphone (6.3 mm Jack plug) into the socket ⑫.

Operation:

- Press button **AUX** [W], then adjust the volume with button ◀ or ▶.

... with external loudspeakers (speaker boxes)

Connection and operation:

- Connect the loudspeakers (4 Ω impedance) to the sockets ⑬ at the rear of the TV set (R = right-hand channel, L = left-hand channel).

– The loudspeakers of the TV set are automatically switched off.

Copying video recordings via the TV receiver

It is possible to copy tapes from one video recorder to the other, or from a camera recorder to a video recorder.
To do this, proceed as follows:

Connection:

- Connect the video or camera recorder from which the copy is to be made to the **blue EURO-AV socket** ⑳.
- Connect the video recorder onto which the copy is to be made on the **black EURO-AV socket** ㉑.

Operation:

- Press button **AV** of the group of buttons [B] on the remote control twice.

– The display shows programme position **A 2**.
Copying can be started.

Copying from the black to the blue EURO-AV socket is possible in any station position.
Monitoring of the copy is possible in the programme position "A 1".

Specification

Mains voltage:

220–240 V AC, 50/60 Hz
(control range of the mains section 190...264 V)

Power consumption:

ST 95—: approx. 165 Wh
ST 82—: approx. 145 Wh

Channel coverage:

01 ... 99
and the special channels S 01 ... S 41

Sound output:

2 × 35 W music power

Service Hints for Specialized Dealers:

The mains cable of this TV set is a plug-in type cable. Order replacement cables according to the type of set at one of our after sales service stations:

Mains cable with round plug ⊡ at the unit side: Order No 8290-991-276.

This equipment meets the international safety and interference regulations.
If your unit malfunctions, it is essential that you contact your dealer. Under no circumstances should you open the set yourself.
The manufacturer accepts no responsibility for damage which occurs under such circumstances.

Subject to alteration
E. and O.E.

Pins Connections of the EURO-AV Socket

If you wish to connect peripheral equipment (eg: computer, amplifiers) to your TV set, your dealer will be able to make the correct standard connections using the table below.

Pin		Signal
1	=	Audio output, R.H.
2	=	Audio input, R.H.
3	=	Audio output, L.H.
4	=	Audio chassis return
5	=	Blue chassis return
6	=	Audio input, L.H.
7	=	RGB blue input
8	=	Switching voltage
9	=	Green chassis return
10	=	–
11	=	RGB green input
12	=	–
13	=	Red chassis return
14	=	–
15	=	RGB red input
16	=	RGB switching voltage
17	=	Video chassis return
18	=	RGB switching voltage chassis return
19	=	Video output
20	=	Video input
21	=	Screening/chassis return